



Utah Watershed Review

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Some Health Problems Happen More in Milford

According to a new study by the Utah Department of Health, people in the Milford, Utah area became ill with certain types of maladies at a rate 20 times greater than the state average in 1997.

The report by the state's Bureau of Epidemiology also found that between 1992 and 1998, Milford residents generally had higher rates diarrhea-causing and respiratory illnesses than in other Utah communities, including communities of similar size such as Panguitch and Parowan.

Critics of the Circle Four Farms' giant hog operation near Milford were quick to claim that the report supports their claim that air or water pollution from the farm is affecting the health of nearby residents.

State officials, however, were being more cautious. Craig Nichols, state epidemiologist, said that too little is known at this point to blame anyone. According to Nichols, the challenge now is to carefully track medical cases in the Milford area and try to figure out what is causing the increased rates of those diseases, he said.

Brian Mauldwin, Circle Four Farms spokesperson, noted that the study found evidence of increased disease rates Milford two years before the hogs arrived.

"There isn't any data pointing the finger at Circle Four, or anyone else for that matter, he said.

Beaver County Commissioner and Milford resident Mark Whitney said he is worried by the report.

"If those figures are correct, it should be concern to everyone in the community," he said.

Byron Muir, another Milford resident, said a series of recent studies have eliminated all potential sources of bacterial infection except Circle Four Farms and a landfill near town. He suspects that wastes containing dangerous bacteria are seeping from the sewage lagoons at the hog farm and spreading through the valley, and says the new study backs up that position.

"Just one of Circle Four's sewage lagoons is larger than all the septic tanks in the county," he said, adding that even a small percentage of seepage from the lagoons could cause a problem.

Denis Frederick, manager of the ground water protection section of the Utah Division of Water Quality (DWQ) disagrees that the sewage lagoons are causing any

problems. He said that several groundwater studies have found no evidence of a problem.

Bacteria contamination was found in several wells in the Milford area in late 1998. Studies performed by the DWQ and the Utah Department of Health found no link between the Circle Four lagoons and the individual wells that were contaminated. According to that report, individual well-head were mostly likely contaminated by on farm sources in those cases.

While the state is confident that no specific water quality problems in the county can be directly linked to the hog operation, detractors of Circle Four are not convinced.

This latest health study looked at hospital discharge records from 1992 to 1998 for Milford, Panguitch, Parowan and the whole state. Investigators pulled all records for certain types of respiratory and diarrheal illnesses, and calculated the overall rate of disease for each area.

The worst year for Milford residents was 1997, when the incidence of diarrheal illness was 409 per 10,000 residents. In Panguitch, the rate was 70 per 10,000; in Parowan it was 29 per 10,000; and in the state as a whole it was 20 per 10,000. That equates to 20 times higher rates of certain illnesses in Milford than in the rest of the state.

The rate for respiratory illnesses was about seven times higher in Milford in 1997 than in Utah as a whole. Milford had 517 cases reported per 10,000 residents as opposed to 73 per 10,000 residents for the state as a whole.

Nichols said that doctors and patients are being urged to report to the state all cases of respiratory and diarrheal illnesses and send in samples for analysis.

"If it is coming from typical sources, then we'll know at least that it is not related to the hog farm," said Nichols. "If we get a new organism that we don't normally check for, it may send the investigation in an entirely new direction."

Little Bear Project Shows Real Improvement

A decade ago, the watershed restoration efforts in the Little Bear River drainage were just getting underway. Now that more than 30 animal manure management projects alone have been completed, significant watershed quality improvements are being seen. A new report from the Utah Division of Water Quality shows a 40 percent decrease in exceedences for Total Phosphorus and a 56 percent decrease for exceedences in Total Suspended Solids between data collected during 1992-93 and data collected during 1998-99. Other water quality parameters also showed improvement, but to a lesser degree.

"we've been doing a lot of hand-waving about lag times and cumulative effects. Now we don't have to wave our arms anymore," said Mike Allred, Utah Division of Water Quality. According to Allred, the River is already meeting Total Maximum Daily Load (TMDL) require-

ments for phosphorus above Hyrum Reservoir.

As the TMDL for the drainage is ready to be released, Allred, who used to be an employee of USU Extension and the co-coordinator of the Little Bear River watershed restoration project, is proud that the monitoring data shows so much progress over the past decade.

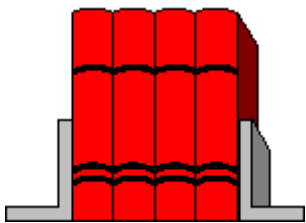
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Learning About our Water

Editor's Note:

In past years, *Utah Watershed Review* has featured a section geared toward elementary school teachers and students called "Learning about our Water." This was a page or two each issue dedicated to giving students and teachers information and activities to do about watersheds, water pollution, and water and soil conservation.

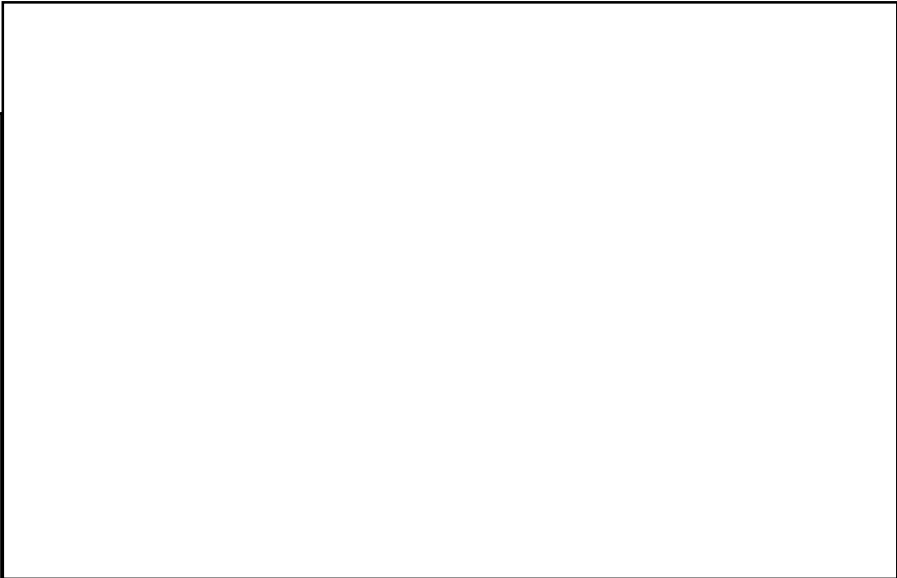
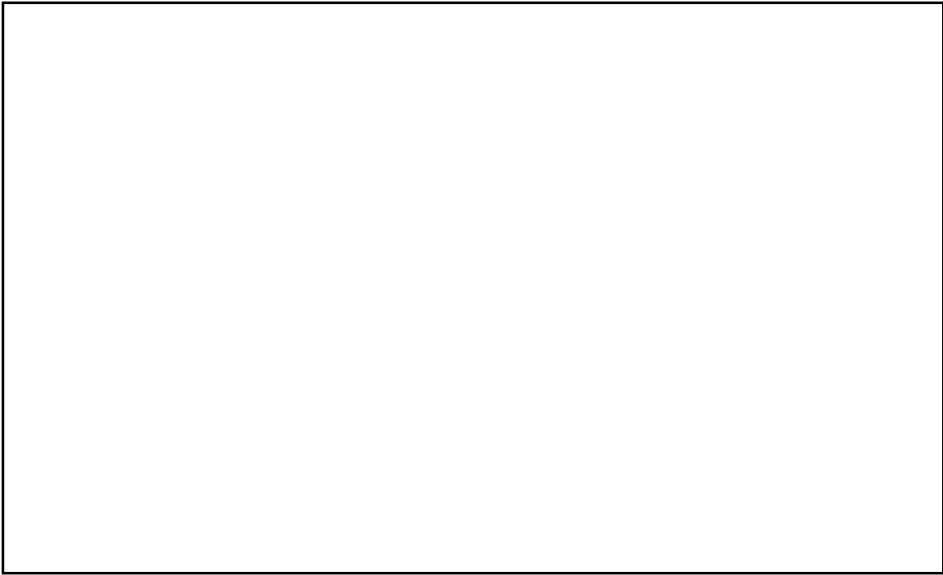
This section was put together by Nancy Hardman, the former secretary in the Environmental Quality Section of the Utah Department of Agriculture and Food. When Nancy left four years ago the section stopped being produced. This year I have decided to resurrect the kid's page and fill it with activities and games about the above-mentioned topics. I will produce the section at least two times during 2000. Please let us know if this information is useful or not. The editorial box at the bottom of this page has ways listed to reach me.

The Water (Hydrologic) Cycle Activity

For the youngest grades, learning about the water, or hydrologic cycle can be an excellent introduction to water education. For older elementary school children this activity is a fun review.

Below are five separate drawings, each depicting one stage in the water cycle. A teacher could photocopy these drawings or prepare new drawings for the students. The students could also draw the scenes themselves as part of an art project.

Once the drawings are complete, the students divide into groups. Each group picks a topic and acts it out in front of the class. Classmates try to guess which area of the water cycle is being acted out. When all of the presentations are finished, volunteers could stand before the class and explain each aspect of the water cycle.



Utah Watershed Review

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Gore Promises more Money for USDA Conservation

Election Year Budget Proposal Asks for more Money for EQIP and other programs

In early January Vice President Al Gore announced that the Administration will seek nearly \$1.3 billion in the FY 2001 budget for conservation programs that help family farmers take steps to protect water quality and the environment and to preserve farmland. This conservation package is part of a larger Administration budget proposal to strengthen the farm safety net.

"Farmers are among the most important stewards of our land and water," Gore said. "Despite the accomplishments made in recent years in stopping soil erosion and protecting water quality, agriculture's environmental challenges are multiplying."

As Gore announced the financial package, he said that the initiatives will provide needed financial support to our family farmers as well as tremendous environmental benefits for the American people.

The centerpiece of the proposal is a new \$600 million program providing additional income to family farmers who voluntarily adopt comprehensive plans to curb erosion and protect water supplies from pesticide and nutrient runoff.

An additional \$125 million will be used to provide opportunities for farmers to establish buffer strips along waterways to improve water quality. The proposal also asks Congress to expand CRP so that an additional 4 million acres of farmland may be enrolled in the program. That will bring total CRP acreage to 40 million nationwide.

Another \$550 million will be used to strengthen several other USDA programs to assist farmers with conservation and environmental efforts. These programs include the Environmental Quality Incentives Program, Wetlands Reserve Program, and Wildlife Habitat Incentives Program. This funding also will be used to expand technical assistance for farmers and ranchers for conservation efforts and expand the Farmland Protection Program.

Specifics of the proposal

The \$1.3 billion package would:

- Fund a new conservation Security Program at \$600 million in FY 2001 and 2002;
- Increase the Environmental Quality Incentives Program by \$125 million per year;
- Increase the Wetlands Reserve Program to enroll 250,000 acres per year;
- Increase the Conservation Reserve Program to 40 million cumulative acres;

- Increase bonuses for continuous sign-ups under the Conservation Reserve Program by \$100 to \$125 million per year, FY 2000 to 2002;

- Increase the Farmland Protection Program to \$65 million per year;

- Increase the Wildlife Habitat Incentives Program to \$50 million per year;

- Provide necessary USDA technical assistance to implement these programs.

Conservation Security Program

The new Conservation Security Program would provide annual payments to farmers and ranchers who implement various conservation practices. Payment levels would be based on the range and comprehensiveness of the practices implemented. Eligible practices would include comprehensive nutrient management, prescribed grazing, and partial field conservation practices such as grassed waterways and windbreaks. The program would be funded through the initiative at \$600 million in FY 2001 and 2002.

Environmental Quality Incentives Program (EQIP)

The EQIP, a key component of the President's Clean Water Action Plan, provides financial, technical, and educational assistance to farmers and ranchers who wish to implement conservation practices on land currently in production. By statute, half of the program funds must be used to address livestock-related concerns. Eligible practices include animal waste management, integrated pest management, habitat restoration, and livestock water development. Program contracts are for 5 to 10 years. The annual authorized level for this program is \$200 million in FY 2000. The initiative would increase the annual level to \$325 million.

Wetlands Reserve Program (WRP)

The WRP offers technical and financial assistance to farmers who wish to restore and protect agricultural wetlands. USDA provides up to 100 percent of the wetland restoration costs and up to 100 percent of the fair market agricultural value of the land in return for permanent or 30-year easements or wetlands restoration cost-share agreements.

The 1996 Farm Bill authorized the WRP to enroll 975,000 cumulative acres. After FY 2000, there will be only 40,000 acres left to enroll under the cap. The

initiative would remove the acreage cap and enroll an additional 210,000 acres in FY 2001, for a total of 250,000 acres, and an additional 250,000 acres in each subsequent year.

New Agreement in Works for Colorado River Water

The seven states along the Colorado River are on the verge of a historic agreement that will set a time frame for enforcing historic water allocations along the river.

"We're in the midst of the most important changes on the Colorado River in more than 40 years," said David Hayes, Deputy Secretary, U.S. Department of Interior. "It's going to happen this year of it won't happen for perhaps a generation."

The problem is that California has been using as much as 800,000 acre-feet of water a year beyond its Colorado River Compact allotment. The agreement, known as interim surplus criteria, will give California 15 years to develop and implement a plan that will bring the Golden State into compliance at an annual usage of 4.4 million acre-feet a year.

An agreement reached at Bishop's Lodge in 1922 gave the lower Colorado River States of Nevada, Arizona, and California 7.5 million acre-feet a year of water. Of that allocation, California got 4.4 million acre-feet, Arizona got 2.8 million acre-feet and Nevada got a poultry 300,000 acre-feet. The upper basin states also got a total of 7.5 million acre-feet.

"There is a climate of change and a necessity of change," said Patricia

A full report on the proposal is available on-line at: www.whitehouse.gov/library/This_Week.cgi?type=p&date=6&briefing=0

Mulroy, of Nevada. The days of overruns are over on the river. Until recently, California could get away with using an additional 600,000 to 800,000 acre-feet a year of water because Arizona and Nevada weren't using all of their allotments. Times have changed. Las Vegas has grown considerably over the past two decades and now uses all of its Colorado River Water. Arizona is now able to use its allotment because of the Central Arizona water delivery project.

Dennis Underwood, from California, says that this will be a tough time in Southern California as that area of the state figures how to significantly cut water usage. Colorado River water in Southern California is used primarily by agricultural concerns in the Imperial Valley and nearby valleys. Voluntary transfer of 500,000 acre-feet of water from agriculture to urban usage and urban conservation will account for the largest amount of reduction. Storage of upper watershed flood release water during wet times and conjunctive use programs make up for the rest.

While this plan may work during normal and wet cycles, drought is another story. If a prolonged drought cycle begins, California and other river states may be in trouble. In the meantime, the new agreement is very close to being signed.

Water Users Workshop Too Big for Hotel

The Annual Utah Water Users Workshop has increased in size over the years to more than 500 registrants, making it impossible for the meetings to continue to be held at the St. George Holiday Inn. The 2001 workshop will be held down the street in the new Dixie Centre, just south of the Bluff Street exit to I-15.

The 2000 edition of the meetings, held March 7-8, 2000 continued a trend to more water quality topics and revisited the issue of urban growth in Utah.

Some of the topics included:

- Milford Valley Ground water investigation,
- Results of USGS National Water Quality Assessment-Great Salt Lake Basin,

- Changes in water quality standards,

- CUP Completion update,
- Financing Utah water quality programs,

- CAFO/AFO strategy and comprehensive nutrient management plans,

- Water education,

- Water law in Utah

- Cloud seeding,

- Noxious weed control, and many other topics were discussed.

One topic not listed above is the annual motivational offering by Sydne Jacques, former Bureau of Reclamation employee. A full discussion of her presentation will appear in the April/May issue of this publication.

Focussing on Conservation Farming and Ranching: Calvin Lasson Keeps it Clean In Spanish Fork Drainage

Lasson feeds 250 head of yearlings for between 90-120 days in a confined corral next to Thistle Creek. The project will fence off the creek from the cattle and provide a vegetative filter strip between the feedlot and the water. Part of the problem with the feed yard is the time of year in which the cattle are confined. Typically in the feed yard from Feb. 1 until the middle of May, the cattle are producing manure next to the stream before and during the wettest time of the year and during spring runoff.

Despite feeling forced to sell in the near future, Lasson stays committed to conservation.

"We've been working on the ranch for a long a time. We've installed sprinklers and pipelines. Now we're going to work on the feeding operation and the creek," said Lasson.

Most of the ranch produces alfalfa and grass hay. Every year, they use about 60 percent of the 5,000 bales of alfalfa and the 9,000 bales of grass hay. The rest is sold.

Calvin Lasson and his siblings own a 650 acre cattle ranch along Thistle Creek in the Spanish Fork River drainage. Lasson, a senior citizen, and his siblings face a dilemma that is becoming all too common throughout Utah and the U.S. The Lassons can't find anyone in the family to continue to run the ranch, so they are looking to sell.

"I'm the last one who had opportunity to run it, [the ranch]" said Calvin Lasson, ranch operator and partner in the family cattle business.

ing property it won't be able to sustain itself," Lasson insisted.

Yet, the family is committed to conservation. Lasson recently was award the conservation rancher of the year award by the Utah chapter of the Soil and Water Conservation Society. Lasson has completed extensive conservation work through a long-term agreement with USDA's Natural Resources Conservation Service, and he is currently ready to begin a water quality contract with the Utah Department of Agricul-

Calvin Lasson stands proudly with his recently received award as Rancher of the Year from the Utah chapter of the Soil and Water Conservation Society.

Along with the recent award from SWCS, he was honored as the Outstanding Weed Worker of the Year in 1999 by the Utah Weed Control Association. He also sits on the Spanish Fork River Coordinated Resource Management Plan steering committee.

We're Looking for Conservation Farmers and Ranchers to Write About

Every issue or two, *Utah Watershed Review* will focus on a farming or ranching operation that employs soil conservation, water conservation and/or water quality practices. The on-farm improvement may be done entirely by the farmer without government help, or as part of a grant or loan program by one or more government agencies.

If you have a conservation story you'd like other farmers and ranchers to know about, or if you know of a conservation farmer or rancher, please contact Jack Wilbur at 801 538-7098, or via E-mail at: j.wilbur@state.ut.us.

The environmental Department for the Salt Lake Organizing Committee for the Olympic and Paralympic Winter Games of 2002 (SLOC) will introduce a new recognition program—the Spirit of the Land awards. Every year until the Games, SLOC will acknowledge individuals and organizations for their efforts to educate the community and preserve the environment.

The Spirit of the Land awards are available to environmental programs containing an educational element. Special consideration will be given to programs addressing issues on SLOC's environmental platform.

“Our Goal is to ensure that we enhance Utah's environment while staging the Salt Lake 2002 Games,” said Diane Conrad, SLOC director of environmental programs. “We hope the Spirit of the Land awards will raise awareness toward both preserving the environment and to SLOC's commitment to the envi-

ronment and the community.”

The International Olympic Committee adopted environment as the third principle of Olympism along with sport and culture in 1994. Since that time, environmental responsibility has been at the heart of the Olympic movement. In conjunction with the IOC's plan, SLOC is committed to being sensitive to the environment in all stages of venue development and operation, the education of the public on environmental issues and to leaving a legacy of environmental improvement.

A panel of judges comprised of environmental specialists will evaluate all applications. Year 2000 winners will be announced at a ceremony held on April 22, Earth Day. Awards will be given in the following categories: youth, education, business, government and community. For additional information, or for an application, access www.Slc2002.org/games, click on environment. Applications will be accepted until March 17.